

### **AMENDMENTS**

Please enter the following amendments:

#### **Amendments to the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. **(previously presented)** A synthetic oligonucleotide comprising a nucleotide sequence consisting of 21 nucleotides of the sequence set forth as SEQ ID NO: 5, the nucleotides being linked via phosphorothioate internucleotide linkages, and the oligonucleotide being specifically complementary to nucleotides 324 to 345 of a conserved *gag* region of the HIV-1 genome, wherein the synthetic oligonucleotide does not have the sequence set forth as SEQ ID NO: 4 and is not complementary to the conserved *gag* region of the HIV-1 genome beyond nucleotides 324 to 345.
2. **(original)** The oligonucleotide of claim 1, wherein the nucleotides comprise at least two 3'-terminal ribonucleotides, at least two 5'-terminal ribonucleotides, or at least two 3'-terminal and at least two 5' terminal ribonucleotides.
3. **(original)** The oligonucleotide of claim 2, wherein the ribonucleotides are 2' -substituted ribonucleotides.
4. **(original)** The oligonucleotide of claim 3, where the 3'-substituted ribonucleotides are 2'-O-alkyl ribonucleotides.
5. **(original)** The oligonucleotide of claim 4, wherein the ribonucleotides are 2'-O-methyl ribonucleotides.
6. **(previously presented)** The oligonucleotide of claim 2, wherein the nucleotides consist essentially of four 3'-terminal ribonucleotides and four 5'-terminal ribonucleotides, flanking 13 deoxynucleotides.

7. **(original)** The oligonucleotide of claim 6, wherein the ribonucleotides are 2'-O-methyl ribonucleotides.
8. **(original)** The oligonucleotide of claim 1, having SEQ ID NO:1.
9. **(original)** The oligonucleotide of claim 1, having SEQ ID NO:3.
10. **(original)** The oligonucleotide of claim 7, having SEQ ID NO:1.
11. **(original)** The oligonucleotide of claim 7, having SEQ ID NO:3.
12. **(original)** The oligonucleotide of claim 1, having SEQ ID NO:2.
13. **(canceled)**
14. **(original)** The oligonucleotide of claim 1, which inhibits HIV-1 or HIV-2 infection in a cell.
15. **(original)** The oligonucleotide of claim 1, which exhibits antiviral activity against HIV-1 and HIV-2.
16. **(canceled)**
17. **(canceled)**
18. **(canceled)**.
19. **(canceled)**

20. (canceled)

21. (canceled)

22. (canceled)

23. (canceled)

24. (canceled)

25. (canceled)

26. (canceled)

27. (canceled)

28. (canceled)

29. (canceled)

30. (currently amended) ~~The method of claim 16, wherein the oligonucleotide is administered~~  
A method of treating HIV-1 or HIV-2 infection in a human comprising  
administering intravenously to the human a synthetic oligonucleotide in an amount  
effective to inhibit the proliferation of HIV-1 or HIV-2, the oligonucleotide comprising a  
nucleotide sequence consisting of 21 nucleotides of the sequence set forth as SEQ ID NO: 5, the  
nucleotides being linked via phosphorothioate internucleotide linkages, and the oligonucleotide  
being specifically complementary to nucleotides 324 to 345 of a conserved gag region of the  
HIV-1 genome.

31. **(original)** A pharmaceutical formulation comprising the oligonucleotide of claim 1 in a pharmaceutically acceptable carrier.

32. **(original)** A pharmaceutical formulation comprising the oligonucleotide of claim 6 in a pharmaceutically acceptable carrier.

33. **(original)** A pharmaceutical formulation comprising the oligonucleotide of claim 7 in a pharmaceutically acceptable carrier.

34. **(canceled)**

35. **(canceled)**

36. **(canceled)**

37. **(canceled)**

38. **(canceled)**

39. **(currently amended)** A method for introducing an intact oligonucleotide into a mammal, the method comprising the step of orally administering to the mammal ~~the oligonucleotide of claim 7~~ a synthetic oligonucleotide comprising a nucleotide sequence consisting of 21 nucleotides of the sequence set forth as SEQ ID NO: 5, the nucleotides being linked via phosphorothioate internucleotide linkages, wherein the nucleotides consist essentially of four 3'-terminal 2'-O-methyl ribonucleotides and four 5'-terminal 2'-O-methyl ribonucleotides, flanking 13 deoxynucleotides and the oligonucleotide being specifically complementary to nucleotides 324 to 345 of a conserved gag region of the HIV-1 genome, wherein the synthetic oligonucleotide does not have the sequence set forth as SEQ ID NO: 4 and is not complementary to the conserved gag region of the HIV-1 genome beyond nucleotides 324 to 345,

whereby the oligonucleotide is present in intact form in the systemic plasma following oral administration.

40. (canceled)

41. (canceled)